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RAW SEQUENCE LISTING

PATENT APPLICATION N: US/09/849,529A

DATE: 01/23/2002

TIME: 17:15:41

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Input Set : D:\pa_00349.txt
 Output Set: N:\CRF3\01232002\I849529A.raw

ENTERED

1 #110> APPLICANT: Fincher, Karen L.
 2 Ziegler, Todd E.
 4 #120> TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
 5 Plants
 7 #130> FILE REFERENCE: 38-21(51893)B
 9 #140> CURRENT APPLICATION NUMBER: US 09/849,529A
 10 #141> CURRENT FILING DATE: 2001-05-07
 12 #150> PRIOR APPLICATION NUMBER: US 60/196,868
 14 #151> PRIOR FILING DATE: 2000-05-09
 16 #160> NUMBER OF SEQ ID NOS: 24076
 18 #210> SEQ ID NO: 1
 19 #211> LENGTH: 592
 20 #212> TYPE: DNA
 21 #213> ORGANISM: Gossypium hirsutum
 23 #220> FEATURE:
 24 #223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A1
 26 #400> SEQUENCE: 1
 28 ccaagcaagt ttggagaagt tctcaagcgc tactaatcca gatgttggtg aacagagttc 60
 30 gaatagtttg gctgagaagg caaacaaaaga gatggcctcg gcagtgaaata gctcggcaga 120
 32 gaagatgaag aacgaatgq ccatgacagt aaataagctcc actgaqaga tgaataaaga 180
 34 gacaacttca ataaagagct cagcggagaa gatgaacaaa gagacagcct tgaataaaa 240
 36 taactcagct gagaagatga aqaagaaac atcattaaat agctcaqctg agaagatgag 300
 38 tcaagataa ca gctgcaaaa atggttcagc tgaataaata aagaagaga cagccttgc 360
 40 agtaaatatc tcagctgaga agatgaacaa agagacagcc ttgacaataa ataactcagc 420
 42 tgagaagatg aacaaagaga tggccaggac agtgaatagc tcagctgaga agatgagaca 480
 44 agagacagct acagttaattg gctcggctga gaagatgaag aaagaagcgg ccttgacagt 540
 46 aagagagctg aacgaagaaq tgaagaaaga aacagccttg acagtaataa ac 592
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 50 #211> LENGTH: 531
 51 #212> TYPE: DNA
 52 #213> ORGANISM: Gossypium hirsutum
 54 #220> FEATURE:
 55 #223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A10
 57 #400> SEQUENCE: 2
 59 cccacgcgtc cgcacagcg tccgcgaaa aaaaaggtat qgggtctcaa cttctgttt 60
 61 ttaactccttt ttattacatg ccagttttca tccagttatc agcctcatta atgttattt 120
 63 gatttttttt tttaatttg aatttttga cttacttga attcttga ttatatatt 180
 65 attattttga atattttat aaaaattt aagcctttt attattta tctatgatt 240

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78 <210> SEQ ID NO: 3
79 <211> LENGTH: 578
80 <212> TYPE: DNA
81 <213> ORGANISM: Gossypium hirsutum
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A11
84 <400> SEQUENCE: 3
88 ccaacgcgtc cgtccagatt ttctctcagt qtttaaatagt gaaacgatgt ccactgtcgg 60
90 aqaagctgct tctctctaacg ctgctcttat tctttatgat gatggcatcc ccatcaccgc 120
92 tgaqaagatt tctacactag ttaaagctgc aaatgtctct gttgaatcct actggccaa; 180
94 ctgttctgct aagctttttg aqaagtgcac cattgaggat ctcataacca atgttgagc 240
96 ttgttggtgt ggtgcgccag tagctgcagc tgcacctgtt qctgctggcg gaggagccgc 300
98 tctgctgctt ccaactctct ctgaagaaaa gaaggaagaa ccggaggaag agagtgatga 360
100 cgatatggga ttacgtttgt ttgattaggt gtgttttggc caattactag ttatatcaca 420
102 tgaaggtagt aacgttttta gagtgtgatt qctattggta ttgcatgtt gattagaaat 480
104 attagttttt tgttgaatga aagttgaacc taagtgcctc ttcttttgtg atctgttttt 540
106 ttgaatctt cctatatata gaagtattat agattcta 578
109 <210> SEQ ID NO: 4
110 <211> LENGTH: 645
111 <212> TYPE: DNA
112 <213> ORGANISM: Gossypium hirsutum
113 <220> FEATURE:
114 <221> NAME/KEY: unsure
115 <222> LOCATION: (1)..(645)
116 <223> OTHER INFORMATION: unsure at all n locations
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A2
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124 cgaacgcgtc qaaataaact caatgggtgc gtgaatttaa qgaagatact taacttttca 60
126 agagccatca accttgaata cctttattgc agtgactgta aaagtttagt tgaactttg 120
128 aatggagatg attgtgtgga ttttgttaat ttaagggaaa ttaacttcaa tgggtgcgtg 180
130 aatttaaaa aaatacttaa tctttcaaga accatcaacc tcaataact ttattgcagt 240
132 gactgtaaaa gtttaattga actttggaat qgagatgatt gttgtgatt tttaattta 300
134 agggaaatta acttcaatgg gtgcgtgaga ttaaggaagg actttgttaa tttaacatcc 360
136 ttgtagtaat ttaagaaaaa tagctaactc ttcaagagcc atcaacctg aattcattga 420
138 ttgctctaat tgaataagtc tggttgaact tcttacctc gataatttgc catctcttga 480
140 tgcctataat cttcatcttg acggaatgca tagtctcaag aaatttctca qgtcccaagt 540
W--> 142 cacttttggt atttagattt atcaaaaacc agaatagnaa atatgtcgtt gcctttcgat 600
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147 <210> SEQ ID NO: 5
148 <211> LENGTH: 607
149 <212> TYPE: DNA
150 <213> ORGANISM: Gossypium hirsutum
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A3
153 <400> SEQUENCE: 5
157 cgaacgcgtc ggtttttttt tttaaaaaa tctttatata taatataat aaataaat 60

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163 caacettctc ccaactatac tctgtataga taaattcaact aatnatcaaa atcttqtita 240
165 tctactgaca aattacacag qcaacttqcc cccatttacg ttttgattga agattgaac 300
167 aaccaaccaa cctcgaattta aagacqgaaa qtagtagcaa aaatctcagc gqatcgtat 360
169 tctcatttgc agatgcacac tttgatttac taaaaggaag taqtccttca aattgacaet 420
171 accgaaagaa ttacatttat ccaacaaatc aacaagcaaa ggtcacagat gccatttcag 480
173 tctaaacttg ttgcctcaca ttctcatttg cttttagtto atgtagagtq ccactctt 540
175 qtgcattgtc acaaaaqgga qgtaaaatct aaaatagtcg ctatttgtat attttaacag 600
177 gcttctc 607

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180 <210> SEQ ID NO: 6

181 <211> LENGTH: 653

182 <212> TYPE: DNA

183 <213> ORGANISM: Gossypium hirsutum

185 <220> FEATURE:

186 <221> NAME/KEY: unsure

187 <222> LOCATION: (1)..(653)

188 <223> OTHER INFORMATION: unsure at all n locations

190 <220> FEATURE:

191 <223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A4

193 <400> SEQUENCE: 6

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195 gtgagaaaa aaaagcttca atctttggtt gttagtggtg tgaacaaaa aaaaaaatgg 60
197 agggcaaaaga ggaggaatgt aaactagggag ccaacaagtt ctctgagaga caacctattg 120
199 ggaatcagc tcaaacagac aaggactaca aggagccacc accagcacca ttgtttgagc 180
201 ctggtgagct caagtcgatg tctttctaca gagcggcat tgetgagttt gttgctacct 240
203 tcttcttctt ttacatcaet gtcttgactg tcatgggtgt gtctcaatct aagaccaa 300
205 gtactactgt tggatttcaa ggcattgett gggcctttgg tggcatgac tttgctcttg 360
207 tttattgtac tcttgcatt tcaagtgccc atattaacc accctgtgac tttqqgtt 420
209 tacttgcaag gaagctgtcc cttaacaagg cagtattcta catgatcatg caatgccttg 480
211 qtgcattctg tggagctggt qtagtgaag gattcgaaag agacagtaga tatgagatgt 540
W--> 213 tggngtggtg gagccaatgt tgtgaaccat ggctacacca aagggtgatg gtcttggtgc 600
Wtj> 215 tgaaatcatt gcacttttgn tcttgnctac actggtttct ctgctactga tgc 653

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218 <210> SEQ ID NO: 7

219 <211> LENGTH: 633

220 <212> TYPE: DNA

221 <213> ORGANISM: Gossypium hirsutum

223 <220> FEATURE:

224 <221> NAME/KEY: unsure

225 <222> LOCATION: (1)..(638)

226 <223> OTHER INFORMATION: unsure at all n locations

228 <220> FEATURE:

229 <223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A5

231 <400> SEQUENCE: 7

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233 cttaatttgc tgcctcttgc ctgttctgct tcaatctctg tattctata agaatagttt 60
235 gggcttttgc tttttgagc aaactatcag tttacttct ctatcctgc aaattctgaa 120
237 agaaaagqga tccgatctga tctgctqcaa atqqqqqaga aqtqggtgtt gatgaaaacg 180
239 gctcagagc ctaccaacat tgcagtgttt aagtatttgg qaaagagqga tgaagacctt 240
241 attttgcgc tcaagatag catcaggttt actcttgat ctgctcatct ctgagacaa 300
243 acaacatct ctgttgcgc tctttctcgc caagatctga tttggtctga ttgaaagaa 360

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/849,529A

DATE: 01/23/2002

TIME: 17:13:41

Input Set : D:\pa_00349.txt

Output Set: N:\CRF3\01232002\I849529A.raw

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249 attcatattg catcttataa caatttceet acagctgcaq gattgqettc ctctgctgct 540
Wt-> 251 ggtnntgctt gtcttggttt tgcacttgca aagcttatga atgtcagtga agatgagagt 600
Wt-> 253 caactttctg ctattgctag gcaagggttca ngcagtgc 638
256 <210> SEQ ID NO: 8
257 <211> LENGTH: 636
258 <212> TYPE: DNA
259 <213> ORGANISM: Gossypium hirsutum
261 <220> FEATURE:
262 <221> NAME/KEY: unsure
263 <222> LOCATION: (1)..(636)
264 <223> OTHER INFORMATION: unsure at all n locations
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A6
269 <400> SEQUENCE 8
271 ttcttcttca aattgtttt ccagttatt ttgtttggtt ttctttgata tctctctctc 60
273 tctcttctca ctccaattt ttctgttct ttctttttt aaatttatat aaattttatg 120
275 aatatattac gttttggttc tgggttgatt tagtcagttt acttctttt ttatttataa 180
277 tcttttttct atcatcaatc tcttttgat ttctataaca ttattacca ttattttaat 240
279 attttgagct tatacacttg attttcgatt acccttttgt gagattcgaa aaaaaaaacc 300
281 caittttttta ctatttttcc gatgaggaga gggagggttc tgcgcgcgcg cgtcatcccc 360
283 gatggagaag aacccaaata cagaggtgtt cggaaaagac catggggtag attcgcagct 420
285 gagatccgag acccgtggaa aaaaaccagg gtttggttag gtactttcga ttccgcgcga 480
287 gaagcagctc gactttacga tacggcggcg atgacaactg gtggacgcga agccaaaacg 540
Wt-> 289 aatttcccaa tcaatccctc gaatactanc cgctttccga tcgataacca ccaccgtcgg 600
291 ttatacctga tgggttaatt tcaagaccgc aaaatg 636
294 <210> SEQ ID NO: 9
295 <211> LENGTH: 663
296 <212> TYPE: DNA
297 <213> ORGANISM: Gossypium hirsutum
299 <220> FEATURE:
300 <221> NAME/KEY: unsure
301 <222> LOCATION: (1)..(663)
302 <223> OTHER INFORMATION: unsure at all n locations
304 <220> FEATURE:
305 <223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A7
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Wt-> 309 cccgcgcgtcc ggtgagnaaa tgaataatcc actaccgaca ctgtctttcg tgtaaagctt 60
311 cagacatacc attaaaggtt acagagattg agagaaaacta ctgtgtggag ttaccgcccc 120
313 ccccaaaaaa ctgtttttt tctgtctctg caataaaactg gaaggaagag acacagagac 180
315 agggagagag agagagagag agagagagag agagagagag agagagagat gtgggggaga 240
317 caqtatggct aagttaacca aaggataaga ttgtatccat ctctcttata ttctctttt 300
319 ttcttqtata aatgccagaa gaagcagatt caaggatatt gagaagaaat ttctaaagat 360
321 ttctttaagc tagctatggg aactcttgca atcagatacag aqgtgtgtga ttctgatata 420
323 taccgtgctt tgggattcaa agaattgggt aaaggagttg ttggaactcc acgattttta 480
325 tcaattcttt ctctgcttct tgaagaaatc gtccaaagaa acgaatgga qtcgcagacg 540
Wt-> 327 gtgaacttca aanataatgt tgccatgttt catgggttaa gagctccacc ataagcatte 600
329 aaatttatat caatcagata ttcaagatag ctgctctcag tcaatcattt ttctctttt 660

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Input Set : D:\pa_00349.txt

Output Set : N:\CRF3\01232002\I849529A.raw

335 <211> LENGTH: 200

336 <212> TYPE: DNA

337 <213> ORGANISM: Gossypium hirsutum

339 <220> FEATURE:

340 <223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-A8

342 <400> SEQUENCE: 10

344 tccatatact tggatgggtt atctcaatgg teatqetaat actttttgtt gtactctttc 60

346 tctatgattc tttcttttct tgaactccat tgcataaagg cttgtaccac qttgtaatgc 120

348 cagttattaat gtatgcaata aaaactatat gtatggtaaa qtatgtattt ttattatttg 180

350 cttaacttcac tgggttggcc 200

353 <210> SEQ ID NO: 11

354 <211> LENGTH: 583

355 <212> TYPE: DNA

356 <213> ORGANISM: Gossypium hirsutum

358 <220> FEATURE:

359 <223> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-B1

361 <400> SEQUENCE: 11

363 gggaaaacta tgccttcga gtccacaacg tgggaataac gacctccttg aatttcagga 60

365 ttcaagagca taatttactt cttycgqaga gtgagggatc atatacggg cagcagaact 120

367 acactagctt agacatacat gtaaggcagt catattcgtt tctgctaacc acggatcaga 180

369 attcaagtag cgtttactac attgtagcaa gtgccagggt tctgaatgaa tgcagtgga 240

371 aacgagttac cgggtgttgc attttgcgtt attctaattc gaaaaggaaag gcattccggtc 300

373 cctcccttga tccaccgcag gatgaattcg acaaaacctt ttcaatgaac caagctagat 360

375 ctatcagatg gaatgtatct gccagtggtg ctgcgccgaa cccacagggg tcgttttagat 420

377 atqqtctgat taatgtgact gaagtttaag tcttgagaaa caaaccacca gagactattg 480

379 atqgaaaaag acgagcgaca ctcaagtqga tatectttgt caatectgct acaccaatcc 540

381 ggccttgtga ccagtataag attaaaggag tatataagct tga 583

384 <210> SEQ ID NO: 12

385 <211> LENGTH: 672

386 <212> TYPE: DNA

387 <213> ORGANISM: Gossypium hirsutum

389 <220> FEATURE:

390 <221> NAME/KEY: unsure

391 <222> LOCATION: (1)..(672)

392 <223> OTHER INFORMATION: unsure at all n locations

394 <220> FEATURE:

395 <225> OTHER INFORMATION: Clone ID: LIB3543-001-Q1-K1-B10

397 <400> SEQUENCE: 12

399 tcaagcttca gcagaaagaa atatttcgta aaagggagag attctgaagc agaaqtaagt 60

401 tctctccact ggggaaagaa gttgaagtgg teatctccgg aggaactgaa caatagttct 120

403 agctcaagtg attctatttc tgaattcaagc agagccagaa attggtcttc taataaggaat 180

405 tctggtattg cttcttcagt taggaactca agatcaacaa gtaqttatgg tagtqqqaga 240

407 ctccctaacc aagcaaatgg aaataattta actttgaatg agtcacccat qgtcacccca 300

409 cagqcaacct aatctgatat tcttactgat atqaatgctc ctgttcccat agaaaactgcc 360

411 tcaactccta ctggttctta caqtccatca qgtagttatg atgaagattt acqaqgttct 420

413 atgcttcca gttcttcaga agttagtggt taccctcttc caattgaaca gqgtagcttc 480

415 caaactaca atataatagc ctttgaagag gtattattag aattgaagc aattgaagc 540

VERIFICATION SUMMARY

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Input Set : D:\pa_00349.txt

Output Set : N:\CRF3\01232002\I849529A.raw

L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:518 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:654 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:820 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:879 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:991 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:993 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:1134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:1168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34
L:1170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34
L:1206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35
L:1208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35
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L:1266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37
L:1324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:1348 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:1360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:1431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41
L:1469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42
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L:1489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43
L:1507 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43
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L:1873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:1944 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56
L:1982 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57
L:1984 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57
L:2055 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:2075 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:2093 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:2166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62
L:2184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:2234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63

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L:2240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64

L:2264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65